



IRON INSIGHT

Are you feeling **TIRE**D and **RUN-DOWN**? Lazy and apathetic? Do you find you have difficulty concentrating? These symptoms could be a sign of **IRON** deficiency, a condition that affects millions of people worldwide. Read on for some iron insight and then take steps, if needed, to make improvements in your diet.

Functions of iron

All cells of the body need oxygen to transform the food we eat into energy that can be utilized to support our body processes and daily activities. Iron is an essential mineral that plays a important role in delivering oxygen to the cells. Most of the iron in the body is a component of two proteins, hemoglobin and myoglobin. Hemoglobin is the oxygen carrier in the blood and myoglobin is the oxygen reservoir in the muscles.



Iron-deficiency anemia

In iron-deficiency anemia, the red blood cells contain too little hemoglobin and, therefore, deliver too little oxygen to body tissues. This limits the ability of body cells to transform food into energy. Symptoms of iron-deficiency anemia reflect energy deficiency:

- ♦ Tiredness
- ♦ Apathy
- ♦ Tendency to feel cold
- ♦ Impaired physical performance
- ♦ Difficulty concentrating and a shortened attention span



The cause of iron deficiency is usually an inadequate iron intake, primarily due to an individual choosing few iron-rich foods and too many foods high in sugar and fat. Blood loss is the primary non-nutritional cause of anemia since approximately 80 percent of the iron in the body is in the blood.

Who is at risk?

- ♦ **Infants, children, teenagers girls and pregnant women:** More iron is needed during periods of growth to support an increase in the blood volume.
- ♦ **Menstruating women:** Iron is lost during monthly periods. Women need approximately 50 percent more iron than men.
- ♦ **Vegetarians:** Since meat is a good source of iron, vegetarians should plan their meals carefully to include other good sources of iron in their diet.
- ♦ **Endurance athletes:** Long periods of strenuous physical activity can cause destruction of red blood cells.

Recommended iron intake

Males, ages 11-18	12 mg/day	Females, ages 11-50	15 mg/day
Males, ages 19 & up	10 mg/day	Females, ages 51 & over	10 mg/day

Sources of iron

MEAT, VEGETABLES, & BREAD		CEREAL	
Beef, lean 3 oz.	2-3 mg	Honey Nut Cheerios 1 cup	5.2 mg
Pork, lean, 3 oz.	1 mg	Kix, 1 cup	5.4 mg
Chicken, 1 thigh	1 mg	Wheaties, 1 cup	4.6 mg
Baked beans with pork, ½ cup	2 mg	Rice Krispies, 1 cup	1.8 mg
Black-eyed peas, cooked, ½ cup	2 mg	Frosted Flakes, 1 cup	2.2 mg
Spinach, fresh, cooked, ½ cup	3 mg	Lucky Charms, 1 cup	5.1 mg
Enriched bread, 2 slices	1.5 mg	Fruit Loops, 1 cup	4.5 mg
		Life, 1 cup	11.6 mg
		Total, 1 cup	21 mg

Factors that influence iron absorption:

The amount of iron actually absorbed by the body is dependent on: how much you take in, the source of the iron and what you ate with it.

- ♦ The iron in meat is most absorbable. When meats are eaten in combination with other foods that contain iron, the iron in the other foods is more readily absorbed.
- ♦ Vitamin C increases the body's absorption of iron. Citrus fruits and vegetables that are good sources of Vitamin C should be eaten with foods that are good sources of iron.
- ♦ Tea and coffee may hinder iron absorption.
- ♦ Calcium supplements may affect iron absorption. They should not be taken at the same time iron-rich foods are eaten.

What about an iron supplement?

If you feel you are not getting enough iron in your diet, you may benefit from taking an iron supplement. Ask your doctor if you are concerned.

Web Sites related to IRON

Vegetarian Resource Center:

<http://www.vrg.org/nutrition/>

GWINNETT COUNTY PUBLIC SCHOOLS SCHOOL NUTRITION PROGRAM

In the operation of the Child Feeding Programs, no child will be discriminated against because of race, sex, color, national origin, age or handicap. If you believe you have been discriminated against, write to: Secretary of Agriculture, Washington, D.C. 20250.